Determination the relationship between αFP amount and hyperbillirubinemai in 100 icteric term newborns admitted in AliAsghar and Imam Khomeini hospitals in Ardabil

Abstract

Introduction and Objectives: one of the disease which newborns sufferd from In primary days after birth, is jaundice that is because of billirubin collection which produced from metabolism hemoglobin. αFP is a protein secreted from yolksac and liver in fetal period which increased it's amount in pregnancy, some anatomical and chromosomal abnormality, malignancies, and liver diseases and decreased after delivery rapidly. αFP decreased with developed of fetus in fetal period. So it seams that there is probably a relationship between maturation and liver functional development and αFP. The study was an attempt to determine the relationship between αFP amount and hyperbillirubinemia in 100 normal newborns sufferd jaundice

Material & Methods: In this study we choice 100 term newborns sufferd from jaundice which 66 of them was boys and 34 of them girls and all was less than 28 days years old, and only because of high amount of billirubin was in pathologic range, they admitted for photothrapy in AliAsghar and Imam Khomeini hospitals after filling out the questioneirs, αFP was measured after seccured their parents agreement. Results analysed by SPSS software.

Results: compare between αFP average amount and age of newborns shows in 1-4 days (518.1 µg/l) , 5-9 days(515.4 µg/l),10-14days(530.8 µg/l), 15-19days(663.2 µg/l), 20—24 days(285.5 µg/l) and more than 25 days (689.6 µg/l), that there was no significant relationship(P =0.21). Compare between αFP average amount and sex shows in female(559.9 µg/l) and male (509.5 µg/l) there was no significant relationship(P=0.24). Compare between αFP average amount and on setting jaundice day shows that there was no significant relationship(P=0.1). Compare between αFP average amount and infant billirubin shows that there was no significant relationship (P=0.87). Compare between αFP average amount and the way of delivery shows in NVD (514.5 µg/l), C/S(543.5 µg/l), (P=0.48) and compare between αFP average amount and weight of birthing time shows in low than 2500gr(454.6 µg/l), 2500-4000gr(529.5 µg/l), more than 4000gr(637 µg/l) that there were no significant relationship(P=0.24). compare between αFP average amount and Blood groups of newborns show in AB(615 µg/l), A(481.3 µg/l), B(65 µg/l), O(590.8 µg/l) that there was no significant relationship(P=0.06)**,** compare between αFP average amount and Rh^+ show that their was no significant relationship(P=0.526)

Conclusion: The results shows that there is no significant relationship between αFP rate and billirubin rate / age /sex/ weight of birthing time/ onsetting jaundice day/ way of delivery/ newborn blood group/ reticulocyte

Keywords: αFP , newborn jaundice, billirubine, Hyperbilirubinemia, Ardabil.